

ABSTRACT

A cable distribution system with distributed architecture that can accommodate both digital and analog subscribers. Each home has at least one Room Interface Unit (RIU), one
5 for each television. There is a local service module associated with a group of RIUs (e.g., one for every ten RIUs). There is also a local headend in the vicinity. The local headend has a block of integrated tuner/receiver/decoders that can be controlled to tune in a selected video channel. The selected video channels and a group of standard channels are multiplexed and sent to the local service modules where a group of programmable converters (one for each
10 RIU) place the channel selected by its corresponding RIU at a predetermined frequency. Each of the RIUs associated with a particular local service module receive the corresponding channel. Depending upon whether the subscriber has subscribed to digital or analog service, they will have either a digital or an analog RIU. The analog RIU may include a bandpass filter while the digital RIU may include one or more IRDs. Forward and return DOCSIS
15 channels are also provided.